

All communications respecting this application should give the serial number, date of filing and name of the applicant.



**U. S. DEPARTMENT OF COMMERCE**  
**Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

Application Number	Filing Date	First Named Applicant	Attorney Docket Number
09/483,337	01/14/00	E. T. Kool	220.00040101

Examiner
L. E. Crane

Art Unit	Paper No.
1623	22

DATE MAILED: n/a

**INTERVIEW SUMMARY**

All participants (applicant, applicant's representative, PTO personnel)

(1) Mr. Loren Albin

(3) Prof. E. T. Kool, Ph.D.

(2) Examiner L. E. Crane, Ph.D. JD

(4) SPE James O. Wilson

Date of Interview: **October 14, 2003**

Type: ☒ Telephonic ☐ Personal (copy given to) ☐ applicant ☐ applicant's representative

Exhibit shown or demonstration conducted: ☐ Yes ☒ No If yes, brief description: See attachment.

Agreement ☐ was reached with respect to some of all of the claims in question. ☒ was not reached

Claim(s) discussed: See page 2.

Identification of prior art discussed: See page 2.

Description of the general nature of what was agreed to if an agreement was reached, or any other comment: See p. 2.

(A fuller description, if necessary, and a copy of the amendments, if available, which the examiner agreed would be allowable must be attached. Also, where no copy of the amendments which would render the claims allowable is available, a summary thereof must be attached.)

1. ☒ It is not necessary for applicant to provide a separate record of the substance of the interview.

Unless the paragraph above has been checked to indicate to the contrary, A FORMAL RESPONSE TO THE LAST OFFICE ACTION IS NOT WAIVED AND MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP § 713.04) If a response to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW.

2. ☐ Since the Examiner's interview summary above (including any attachments) reflects a complete response to each of the objections, rejections and requirements that may be present in the last Office action, and since the claims are now allowable, the completed form is considered to fulfill the response requirements of the last Office action. Applicant is not relieved from providing a separate record of the interview unless box 1 above is also checked.

Examiner Note: You must sign this form unless it is an attachment to another form.  
PTOL-413 (amended 03/13/01)

09/483,337 - P. N. **22**

COPY FOR [ ] File ☒ Applicant

Continued on next page(s) ->>

Art Unit 1623

INTERVIEW SUMMARY(cont.)

Claims discussed: All remaining of record, claims 44-48, 50-54 and 56-60 in particular.

Identification of prior art discussed: Northwestern University '699, Letsinger et al. '943, and Gryaznov et al. '903.

Description of the general nature of what was agreed to if an agreement was reached, or any other comment: Applicant requested the interview. Applicant requested clarification of the second paragraph rejection. Clarification was provided, noting that the judicially recognized first use of "to comprise" did not extend to subsequent use of a related term and that the repeated use of the term made it difficult to define the metes and bounds of the subject matter being claimed. No resolution of the subsequent rejection alleging confusion of meaning because of the presence of "comprising" and "consisting of" language in the same claim.

Discussion of how the instant claims are distinguished from the prior art revealed that the terms "not directly adjacent to" and "substantially adjacent to" meant that applicant's were basing their asserted variation from the prior art on chemical ligations which were taking place only when the hybridization occurred with either a gap or an overlap in the oligonucleotides to be chemically ligated.

Applicant then asserted that the elimination of one oligonucleotide of less than 7 bases in length distinguished over the prior art in the first anticipation rejection. Applicant was informed that there was also an obviousness rejection of record citing the Northwestern University '699 reference.

Applicant argues that claim 56, directed to RNA molecules being ligated was not found in the prior art. Applicant was informed that the instant references contained the generic terms "polynucleotide" and "oligonucleotide" which are generally understood by the ordinary practitioner to include both DNA and RNA.

Art Unit 1623

## INTERVIEW SUMMARY(cont.)

Notes from meeting with Jeff Fredman: He suggested that enablement rejection should raise the issue of whether Kool had shown that the process being claimed was supported by a showing of hybridization dependent ligation or not. Also noted that IF Kool amends claims to avoid the prior art by claiming gaps or overlaps, then an enablement rejection can be made final because applicants amendment would necessitate the new grounds of rejection. Also he suggested another enablement (or written description) question: has Kool shown that the process being claimed actually provides a means of distinguishing a mutant (gap or overlap) from the non-mutant polynucleotide or is this just blunt end ligation and therefore not capable of being used to test for mutant nucleic acid sequences (would require non-final rejection or not ???).

*Made for use of  
first office action*